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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,482	11/28/2003	Seiichi Katou	500.43301X00	1153

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EXAMINER

GIESY, ADAM

ART UNIT	PAPER NUMBER
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2627

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/02/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/722,482

Applicant(s)

KATOU ET AL.

Examiner

Adam R. Giesy

Art Unit

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7 and 8 is/are rejected.
- 7) ☒ Claim(s) 9-14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claim 7 is objected to because of the following informalities:

Examiner suggests that, line 2 of claim 7 should be amended to read --
...substrate, the optical axes of the --, instead of "...substrate, the optical axis of the".

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 7 is rejected under 35 U.S.C. 102(b) as being anticipated by Ishihara (US Pat. No. 5,978,404).

Regarding claim 7, Ishihara discloses an optical device comprising two light emitting elements each having an optical axis (see Figure 2, elements 4 and 5) and being mounted on a surface of a substrate (element 2a), the optical axis of the two light emitting elements being arranged perpendicular to each other and intersecting each other (elements 4a and 5a), and at least one prism (6) having at least one of a reflection and transmission surface (6a) mounted on another surface of the substrate (11) so that the at least one of the reflection and transmission surface forms an angle of 45 degrees with respect to the optical axes at the intersection thereof (see column 3, lines 58-60), a thickness of the another surface of the substrate on which the at least one prism is

mounted being thinner than a thickness of the surface of the substrate on which the two light emitting elements are mounted (see Figure 2, elements 2a and 11), and among circumferences of the another surface of the substrate on which the at least one prism is mounted, circumferences of the another surface of the substrate which are opposite to the two light emitting elements are open (see Figure 2).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ishihara (US Pat. No. 5,978,404) in view of Nakamura et al. (hereinafter Nakamura – US Pat. No. 6,985,424 B1).

Regarding claim 8, Ishihara discloses all of the limitations of claim 7 as discussed in the claim 7 rejection above. Ishihara fails to disclose any electrode on the same surface as the light emitting elements.

Nakamura discloses an optical element formed on one substrate, including light emitting elements as well as a prism, wherein a plurality of thin film electrodes for electrical connection of the two light emitting elements are provided on the surface of the substrate on which the two light emitting elements are mounted in a region between the two light emitting elements (see Figure 3a, elements 33 and 34).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the optical device as disclosed by Ishihara with the electrodes as disclosed by Nakamura the motivation being to provide a quick and cost effective method of assembly by making the parts easy to connect.

Allowable Subject Matter

6. Claims 9-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 9 is allowable since none of the prior art of record, alone or in combination, disclose or suggest all of the limitations of claim 7 as well as the further limitation that the at least one prism has two of the at least one of reflection and transmission surfaces mounted at different positions on the another surface of the substrate so that the reflection and transmission surfaces form an angle of 45° with respect to the optical axes at the intersection thereof.

Claims 10 and 11 are allowable as being dependent upon the aforementioned claim 9.

Claim 12 is allowable since none of the prior art of record, alone or in combination, disclose or suggest all of the limitations of claim 8 as well as the further limitation that the at least one prism has two of the at least one of reflection and transmission surfaces mounted at different positions on the another surface of the substrate so that the reflection and transmission surfaces form an angle of 45° with respect to the optical axes at the intersection thereof.

Claims 13 and 14 are allowable as being dependent upon the aforementioned claim 12.

Response to Arguments

7. Applicant's arguments with respect to claims 7-14 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

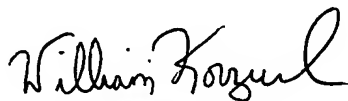
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adam R. Giesy whose telephone number is (571) 272-7555. The examiner can normally be reached on 8:00am- 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William R. Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2627

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ARG 3/21/2007

A handwritten signature in black ink, appearing to read "Adam R. Gies". The signature is fluid and cursive, with a long horizontal stroke at the end.A handwritten signature in black ink, appearing to read "William Korzuch". The signature is cursive and somewhat stylized.

WILLIAM KORZUCH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600